

DigitalMedia™ Cable, plenum

Crestron DM-CBL-P cable provides a high-performance, single-cable wiring solution for DigitalMedia (DM) systems in a commercial plenum application. Within a single plenum-rated jacket, DM-CBL-P contains one high-bandwidth/low-crosstalk shielded 4-twisted pair (STP) cable, one CAT5e unshielded 4-twisted pair (UTP) cable, and one DMNet cable.

The STP "Video Data" cable, which connects to the 'D' port of a DigitalMedia device, is of a specialized construction designed to allow the longest possible cable lengths* for transporting high-definition digital video and audio. The Cat5e "Data Management" cable, which connects to the 'M' port, carries high-speed Ethernet and other data, plus 5V DC power. Finally, the DMNet cable carries additional proprietary control signals and 24V DC power.

Wiring a DigitalMedia system using DM-CBL-P is simple, requiring just one cable to be run to each DM receiver (i.e. Room Controller) and transmitter location*. Foot markers are printed on the outer jacket making it easy to determine the exact length of each cable run when commissioning the installed system.

Termination of a DM cable is accomplished using one standard RJ45 (not provided) for 'M', one detachable terminal block (provided with each DM device) for DMNet, and one Crestron DM-CONN shielded RJ45 (sold separately) for 'D'. The DM-CONN connector enables fast and reliable termination of the shielded twisted-pair cable without requiring any special tools.

For non-plenum applications, use DM-CBL-NP.

AVAILABLE MODELS

DM-CBL-P-SP500

DigitalMedia™ Cable, plenum, 500 ft spool

SPECIFICATIONS

'D' Video Data

Construction: Four twisted pair, each pair isolated by an internal spline within an inner jacket, shield, braid, and overall jacket

(4) Twisted Pairs: Colors: Blue/white, orange/white, green/white, brown/white;

Conductors: 24 AWG x8 solid copper;

Insulation: 0.0055 inch thick FEP;

Outer Diameter (per conductor): 1.028 ±0.02 mm;

Shield: Aluminum/Mylar tape w/aluminum on the outside;

Braid: Tin/copper (45% coverage);

Mutual Capacitance: 5600 pF / 100 m;

Capacitance Unbalance: 330 pF / 100 m;

Characteristic Impedance: 100 ohms ±15% (1-250 MHz)

Inner Jacket: Color: Natural;

Material: Low-smoke PVC;

Thickness: 0.015 inch

Jacket: Color: Blue;

Material: Low-smoke PVC;

Thickness: 0.018 inch;

Outer Diameter: 7.62 ±0.38 mm

'M' Data Management (CAT5E)

(4) Twisted Pairs: Colors: Blue/white, orange/white, green/white, brown/white;

Conductors: 24 AWG x8 solid copper;

Insulation: 0.0077 inch thick FEP;

Shield: none;

Mutual Capacitance: 14 pF / ft nominal;

Capacitance Unbalance: 330 pF / 100 m maximum;



Characteristic Impedance: 100 ohms ±15% (0.772 to 100 MHz);

Velocity of Propagation: 70%;

Conductor DC Resistance: 28.6 ohms / 1000 ft maximum;

DC Resistance Unbalance: 3% maximum

Jacket: Color: Yellow;

Material: Low-smoke PVC;

Ripcord: yes;

Thickness: 0.018 inch;

Outer Diameter: 0.185 inch nominal

'DMNet' Control & Power

Construction: (1) 22 AWG shielded pair (control) and (1) 18 AWG pair (power) w/overall jacket

Control Pair: Colors: Gray/orange;

Conductors: 22 AWG x2 stranded copper;

Insulation: 0.025 inch thick foam FEP;

Shield: Aluminum/Polyester (100% coverage) w/aluminum on the inside;

Drain: 24 AWG tinned stranded copper;

Capacitance: 12.5 pF / ft, nominal;

Impedance: 100 ohms, nominal

Power Pair: Colors: Red/black;

Conductors: 18 AWG x2 stranded copper;

Insulation: 0.01 inch thick low-smoke PVC;

Shield: none

Jacket: Color: Gray;

Material: Low-smoke PVC;

Ripcord: yes;

Thickness: 0.0325 inch;

Outer Diameter: 0.25 inch nominal

Outer Jacket

Composite Construction: All wires contained in a Mylar wrap w/overall outer jacket

Material: Low-smoke PVC, flexible

Ripcord: yes

Thickness: 0.03 inch

Outer Diameter: 0.58 inch (14.73 mm) nominal

Color: Blue w/red stripe

Rating

NEC Article 800; UL Subject 444, Type CMP; CSA Type CMP

AVAILABLE ACCESSORIES

DM-CONN

DigitalMedia™ Cable Connector

* The maximum allowable cable length depends on multiple factors. One or more DM Repeaters (Model DM-DR) may be required. Refer to the Crestron DigitalMedia Design Guide, Doc. #4789 for complete wiring guidelines.